

VT-HP®

SAFETY DATA SHEET

This Safety Data Sheet was prepared following the Code of Practice: Preparation of Safety Data Sheets for Hazardous Chemicals from Work Safe Australia and the New Zealand Code of Practice for the Preparation of Safety Data Sheets (SDS) [No. HSNO CoP 8-1 09-06]. This product has been classified according to the hazard criteria of the Globally Harmonized System (GHS) and contains all of the information required by Safe Work Australia and Work Safe New Zealand.

1. Identification

Product Identification

Product Identifier: VT-HP®
Recommended Use: VT-HP® is a chemical anchor for cracked and non-cracked concrete.
Use Restrictions: To ensure proper installation use according to package directions, complete application instructions can be found in Simpson Strong-Tie catalogs or online at strongtie.com.

Company Identification

Company: Simpson Strong-Tie Australia Pty Limited
Address: Unit 1/16 Kenoma Place
Arndell Park, NSW 2148
Australia
Phone: +612 9831 7700
Website: www.strongtie.com.au
Emergency: 13 11 26

Company: Simpson Strong-Tie New Zealand
Address: 52A Arrenway Drive
Albany, Auckland 0632
New Zealand
Phone: +64 9 477 4440
Website: www.strongtie.co.nz
Emergency: 0800 POISON (0800 764 766)

2. Hazard Identification

General Information

VT-HP® is a high-performance fast cure vinylester resin-based chemical anchor developed for anchoring applications in cracked and non-cracked concrete. This product has been assessed according to the Globally Harmonized System (GHS). The final cured product will be gray in color and can be considered nonhazardous. Some hazards may apply upon grinding or cutting through hardened product. This Safety Data Sheet covers the hazards and responses for the safe use of this product.

GHS Classification

Classification according to HazCom2012 (GHS)

Physical Hazards: Not Classified.
Health Hazards: Serious Eye Irritation Category 2 H319: Causes serious eye irritation
Sensitization, Skin Category 1 H317: May cause an allergic skin reaction
STOT SE 3 Category 3 H335: May cause respiratory irritation.
Environmental Hazards: Not classified.
Main Symptoms: Irritation of eyes. Symptoms include redness, itching, burning, tearing, swelling, and blurred vision. May cause rash/allergic reaction to the skin.

GHS Label Elements



Exclamation
Point

Contains: Ethylene dimethacrylate, Methacrylic Acid, monoester with propane-1,2-diol, Dibenzoyl Peroxide
Signal Word: **Warning**
Hazard Statements: H319: Causes serious eye irritation.
H317: May cause an allergic skin reaction.
H335: May cause respiratory irritation.
Precautionary Statements:
Prevention: P102: Keep out of reach of children.
P103: Read label before use.
P202: Do not handle until all safety precautions have been read and understood.
P261: Avoid breathing mist or vapor.
P264: Wash thoroughly after handling.

Response:	P272: Contaminated clothing should not be allowed out of the workplace. P280: Wear protective gloves/protective clothing/eye protection/face protection. P302+P352: IF ON SKIN: Wash with plenty of water. P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing. P333+P313: If skin irritation or rash occurs: Get medical advice/attention. P362+P364: Take off contaminated clothing and wash before reuse. P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Storage:	P337+P313: If eye irritation persists: Get medical advice/attention.
Disposal:	P405: Store locked up. P501: Dispose of contents/container in accordance with local/regional regulations.

Supplemental Label Information: None known.

3. Composition Information

General Information

This product is a mixture. Hazardous ingredients for each component are listed below. May include other nonhazardous ingredients. May include other trace ingredients, see Section 15.

List of abbreviations and symbols:

Classification: Globally Harmonized System Classifications

The full text for H- phrases is displayed in section 16. All concentrations are in percent by weight unless otherwise noted.

Composition- All compositions are in percent by weight unless otherwise indicated.

Chemical Name	Weight %	CAS Number	EC Number
Ethylene Dimethacrylate Classifications: Skin Sens. 1: H317, STOT SE 3: H335	10-20	97-90-5	202-617-2
Methacrylic Acid, monoester with propane-1,2-diol Classifications: Eye Irrit. 2: H319, Skin Sens. 1: H317	3-10	27813-02-1	248-666-3
Dibenzoyl Peroxide Classifications: Org. Perox. B: H241, Eye Irrit. 2: H319, Skin Sens. 1: H317	1-3	94-36-0	202-327-6
1,1'-(p-tolylimino)dipropan-2-ol Classifications: Acute Tox. 2: H300, Eye Irrit. 2: H319, Aquatic Chronic 3: H412	1-3	38668-48-3	254-075-1
1-isopropyl-2,2-dimethyltrimethylene diisobutylate Classifications: Repr. 2: H361d Aquatic Chronic 3: H412	< 1	6846-50-0	229-934-9

4. First-Aid Measures

General Information

Provide general supportive measures and treat symptomatically. Symptoms may be delayed. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. If exposed or concerned: Get medical advice/attention. Wash contaminated clothing before reuse.

Routes of Exposure

Eye Contact:	Immediately flush eyes with plenty of cool water for at least 15 minutes while holding the eyes open. Remove contact lenses if present and easy to do. If redness, burning, blurred vision, or swelling persists, consult a physician immediately.
Skin Contact:	Remove contaminated clothing and product, immediately wash affected area with soap and water. Do not apply greases or ointments. If rash or irritation persists consult a physician.
Ingestion:	Rinse mouth immediately. Do not induce vomiting unless told to do so by a poison control center or doctor. If vomiting occurs keep head low so that stomach contents don't get into the lungs. Never give anything by mouth to an unconscious person. Consult a physician immediately.
Inhalation:	If breathing is difficult remove patient to fresh air and keep at rest in a position comfortable for breathing. Give oxygen or artificial respiration if needed. If patient continues to experience difficulty breathing, consult a physician.

Most Important Symptoms

Irritation to the eyes. Symptoms include redness, itching, tearing, swelling, and blurred vision. Rash/dermatitis. Respiratory irritation.

5. Fire-Fighting Measures

Suitable Extinguishing Media: Extinguish with foam, carbon dioxide, dry powder, or water fog.

Additional Information:	Do not use water jet as an extinguisher as this will spread the fire.
Hazards during Fire-Fighting:	Hazardous decomposition products may occur when materials polymerize at temperatures above 500° F (260°C). Irritating and toxic gases/fumes may be released during a fire. Do not allow run-off from fire-fighting to enter drains or water courses.
Fire-Fighting Procedures:	Use standard firefighting procedures and consider the hazards of other involved materials. In case of fire and/or explosion do not breathe fumes. Self-contained breathing apparatus and full protective clothing must be worn. Move containers from fire area if you can do so without risk. Cool containers with flooding quantities of water until well after fire is out.
Combustion Products:	In combustion emits toxic fumes.

6. Accidental Release Measures

Personal Precautions

Non-emergency personnel: Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep unnecessary personnel away. Wear appropriate personal protective equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Avoid inhalation of vapors or mists. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained.

Emergency personnel: Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate personal protection.

Clean-Up Methods

Small spills (uncured): Wipe up with absorbent material (e.g. cloth, fleece). Place in leak-proof containers. Seal tightly for proper disposal. Clean surface thoroughly to remove residual contamination. If desired, approved solvents, such as ketones (MEK, acetone, etc.), lacquer thinner, or adhesive remover can be used. Do NOT use solvents to clean adhesives from skin. Take appropriate precautions when handling flammable solvents. Solvents may damage surfaces to which they are applied.

Large spills (uncured): Stop the flow of material, if this is without risk. Dike far ahead of spill to contain material. Use a non-combustible material like vermiculite, sand or earth to soak up the product. Place in leak-proof containers. Seal tightly for proper disposal. Following product recovery, flush area with water. Keep combustibles away from spilled material.

Cured Material: Chip or grind off surface. If you are grinding or cutting cured product, ensure good work practice and use of personal protective equipment as needed to control exposure to respirable dust. Take precautionary measures; do not allow dust to build up.

Environmental Precautions

Avoid release to the environment. Contact local authorities in case of spillage to drain/aquatic environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid discharge into drains, water courses or onto the ground.

7. Handling and Storage

Handling

Mechanical ventilation or local exhaust ventilation is recommended. Keep away from open flame, hot surfaces, and sources of ignition. Wear appropriate personal protective equipment. When using, do not eat, drink or smoke. Do not breathe dust, mist or vapor. Use only in well-ventilated places. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling. Wash contaminated clothing before reuse. Observe good industrial hygiene practices. To obtain optimal performance from Simpson Strong-Tie products and to achieve maximum allowable design load, the products must be properly installed and used in accordance with the installation instructions and design limits provided by Simpson Strong-Tie.

Storage

Full Unused Cartridges: Keep away from incompatible materials. Keep in original container. Keep container tightly closed. Store in a dry, well-ventilated place out of direct sunlight, between 5-25°C (41-77°F). Keep away from heat and sources of ignition. Protect container from physical damage. Keep out of reach of children.

Partially Used Cartridges: To store partially used cartridge temporarily replace cap or leave hardened nozzle in place. To re-use, attach new nozzle. Do not try to dispense after adhesive hardens in nozzle. CAUTION: Adhesive will start to gel in the nozzle. Adhesive will gel faster at higher temperatures. Material under pressure can blowout the back of the cartridge if the adhesive in the nozzle hardens. Use only an appropriate Simpson Strong-Tie® mixing nozzle in accordance with Simpson Strong-Tie instructions. Modification or improper use of mixing nozzle may impair adhesive performance. Keep out of reach of children.

8. Exposure Controls / Personal Protection

Personal Protective Equipment

Protective Measure: Wear appropriate protective equipment.

VT-HP®
SAFETY DATA SHEET



Eye Protection: Chemical splash goggles or safety glasses with side shield are recommended.
Hand Protection: Wear chemical-resistant gloves such as: Nitrile, neoprene, or butyl rubber.
Skin and Body Protection: Wear long sleeve shirt/long pants and other clothing as required to minimize skin contact.
Respirator Protection: If engineering controls do not maintain airborne concentrations below recommended exposure limits, or if discomfort is experienced, an approved respirator should be worn.
General Hygiene: Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

Engineering Controls

Mechanical ventilation or local exhaust ventilation is recommended. Ventilation rates should be matched to conditions to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station and emergency shower.

Exposure Limits

Component	Australia National Workplace OELs	New Zealand Workplace Exposure Limits (WES)	US. ACGIH (TLV)
Dibenzoyl Peroxide (CAS 94-36-0)	5 mg/m ³	5 mg/m ³	5 mg/m ³

9. Physical and Chemical Properties

Property	
Physical State:	Liquid, Paste
Color:	Various
Odor:	Characteristic
pH:	No data
Flammability limit – lower %:	No data
Flammability limit – upper %:	No data
Vapor Pressure:	No data
Vapor Density:	No data
Solubility:	Insoluble in water
Freezing/Melting Point:	No data
Boiling Point:	No data
Flash Point:	No data
Evaporation Rate:	No data
Decomposition Temperature:	No data
Relative Density:	1.7
VOC:	114 g/L
Viscosity:	No data

10. Stability and Reactivity

Resin (White Side)

Reactivity: This product is stable and non-reactive under normal conditions.
Chemical Stability: Stable under normal storage conditions.
Condition to Avoid: Heat and open flame.
Substances to Avoid: Strong oxidizing agents. Strong acids.
Hazardous Reactions: Hazardous reactions will not occur under normal transport or storage conditions.
Decomposition Products: In combustion emits toxic fumes.

11. Toxicological Information

Likely Routes of Exposure

Ingestion: There may be soreness and redness of the mouth and throat.
Inhalation: Do not inhale dust from cutting/grinding cured product. There may be irritation of the throat with a feeling of tightness in the chest. Exposure may cause coughing or wheezing.
Skin contact: There may be irritation and redness at site of contact. May cause an allergic skin reaction.
Eye contact: Causes serious eye irritation. There may be redness and the eyes may water profusely.
Symptoms: Redness, itching, tearing, swelling, and blurred vision. Rash/dermatitis. Respiratory irritation.

Information on Toxicological Effects

Acute Effects

Toxicity: Not considered acutely toxic.

Chemical	Estimate
VT-HP® Toxicity Estimate	
	Acute, Oral, LD50 2000 mg/kg

Skin corrosion/irritation: No data available.
Eye damage/eye irritation: Causes serious eye irritation.
Respiratory sensitization: No data available.
Skin sensitization: May cause an allergic skin reaction.
Aspiration hazard: No data available.
Specific target organ toxicity: Single exposure May cause respiratory irritation.

Chronic Effects

Germ cell mutagenicity: No data available.
Carcinogenicity: No data available.
Reproductive toxicity: No data available.
Specific target organ toxicity: Repeated exposure No data available.

Further Information

Toxicological, ecotoxicological, physical, and chemical properties may not have been fully investigated. Hazard data above is estimated based on best available information. Some workers with pre-existing medical conditions such as: asthma, allergies, or impaired pulmonary and/or liver functions, or who may be particularly susceptible to this material, may be affected by exposure to this material.

12. Ecological Information

General Information

Information given is based on the components and the ecotoxicity of similar products. VT-HP® is not environmentally classified. Avoid release to the environment.

Supporting Data

Component	Estimate
Catalyst Component B	Aquatic, Fish, LC50 > 500 mg/l, 96 hours
	Aquatic, Daphnia magna, EC50 > 500 mg/l, 48 hours
	Aquatic, Algae, IC50 > 150 mg/l, 72 hours
Dibenzoyl Peroxide	Aquatic, Fish, LC50 0.0711 mg/l, 96 hours
	Aquatic, Daphnia magna, EC50 0.110 mg/l, 48 hours
	Aquatic, Algae, EC50 0.0711 mg/l, 72 hours

Persistence and degradability: Biodegradable.
Bioaccumulative potential: No data available for this product.
Mobility in soil: No data available.

Further Information

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this product.

13. Disposal Consideration

Waste Disposal of Substance: Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national regulations.
Container Disposal: Empty containers or liners may retain some product residues; follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.
Disposal of Cured Product: Chip or grind off surface. Solid material does not need special disposal consideration.

14. Transportation Information

DOT: VT-HP® in cartridges are not regulated for transport.

IMDG / IATA: VT-HP® in cartridges are less than 5L, and are **exempt** from EHS classification when shipping by **AIR** (IATA A197) or **WATER** (IMDG Code 2.10.2.7). Please contact Simpson Strong-Tie if you are trying to ship VT-HP® in quantities larger than 5L.

Additional Information

Special precautions for user: Read safety instructions, SDS and emergency procedures before handling.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not intended to be transported in bulk

This information does not cover all specific regulatory or operational requirements of this product. The classifications for transportation may vary by container volume or different regional or national regulations.

15. Regulatory Information

United States

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Superfund Amendments and Reauthorization Act of 1986 (SARA):

Hazard Categories:					
	Immediate	Delayed	Fire	Pressure	Reactivity
Resin	Yes	Yes	No	No	No
Hardener	Yes	Yes	No	No	No

SARA 302 Extremely hazardous substance: None.

SARA 311/312 Hazardous chemical: Yes

SARA 313 (TRI reporting): None.

Canada

This product has been classified according to the hazard criteria of the HPR and the SDS contains all of the information required by the HPR.

New Zealand National Regulations

VT-HP® HSNO Approval Number: HSR002544

European Union

The product is classified in accordance with EC directives or respective national laws. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006.

This product is not subject to or not applicable for any of the following International Regulations; **Stockholm Convention, Rotterdam Convention, Kyoto Protocol, Montreal Protocol, Basel Convention.**

International Inventories

Australia	One or more components of this product have an unknown status on the Australian Inventory of Chemical Substances (AICS).
Canada	All components of this product are included on the Domestic Substances List (DSL).
China	One or more components of this product have an unknown status on the Inventory of Existing Chemical Substances in China (IECSC).
Europe	One or more components of this product have an unknown status on the European Inventory of Existing Commercial Chemical Substances (EINECS) or are exempt from listing.
Japan	One or more components of this product have an unknown status on the Inventory of Existing and New Chemical Substances (ENCS).
Korea	One or more components of this product have an unknown status on the Existing Chemicals List (ECL).
New Zealand	One or more components of this product have an unknown status on the New Zealand Inventory. Contact Simpson Strong-Tie Environmental Health and Safety if the status of this product on the inventory is desired.
Philippines	One or more components of this product have an unknown status in the Philippine Inventory of Chemicals and Chemical Substances (PICCS).
United States	All components of this product are listed on the Toxic Substances Control Act (TSCA) Inventory or are not required to be listed.

16. Other Information

Date Prepared or Revised: July 2022
Supersedes: New
Contact Simpson Strong-Tie Environmental Health and Safety at EHS@strongtie.com

Abbreviations

ACGIH:	American Conference of Governmental Industrial Hygienists
CAS No.:	Chemical Abstract Service Registry Number
CERCLA:	Comprehensive Environmental Response, Compensation and Liability Act (U.S. EPA)
HPR:	Hazardous Product Regulations (Canada)
DOT:	Department of Transportation (U.S.)
EPA:	Environmental Protection Agency (U.S.)
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals
HEPA:	High-Efficiency Particulate Air
HMIS:	Hazardous Materials Identification System
IARC:	International Agency for Research on Cancer
IATA:	International Air Transport Association
IMDG:	International Maritime Dangerous Goods code
NIOSH:	National Institute of Occupational Safety and Health (U.S.)
NFPA:	National Fire Protection Association (US)
NTP:	National Toxicology Program (US)
OSHA:	Occupational Safety and Health Administration (U.S.)
PEL:	Permissible Exposure Limit
SARA:	Superfund Amendments and Reauthorization Act (U.S. EPA)
STEL:	Short Term Exposure Limit (15 minute Time Weighted Average)
STOT:	Specific Target Organ Toxicity (GHS Classification)
TLV:	Threshold Limit Value
TSCA:	Toxic Substances Control Act (U.S.)
TWA:	Time Weighted Average (exposure for 8-hour workday)
VOC:	Volatile Organic Compounds
WHMIS:	Canadian Workplace Hazardous Materials Information System

Full Text of H – Phrases Under Section 3

H241:	Heating may cause fire or explosion.
H300:	Fatal if swallowed.
H301:	Toxic if swallowed.
H315:	Causes skin irritation.
H331:	Toxic if inhaled.
H335:	May cause respiratory irritation.
H400:	Very toxic to aquatic life.

Disclaimer

This Safety Data Sheet (SDS) is prepared by Simpson Strong-Tie Co. The information it contains is offered in good faith as accurate as of the date of this SDS. This SDS is provided solely for the purpose of conveying health, safety, and environmental information. No warranty, expressed or implied, is given. Health and Safety precautions may not be adequate for all individuals and/or situations. It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations.

© 2022 Simpson Strong-Tie Company Inc.